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Agricultural Taxation in a Developing
Economy: A Case Study of India

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A Case Study of India

(S.S. Jahl)

Most of the developing economies are heavily dependent upon their agricultural sector. Lower the level of development, heavier becomes this dependence. Table-1 compares the share of agriculture in the gross national product of some of the major developed and developing countries from 1950 through 1967. It shows a high degree negative association of dependence of an economy on an economy on its agriculture with the level of its development. With the process of growth, this dependence has been declining over time; more rapidly in the developed economies. In the under developed countries, however, the agricultural industry itself operates at a very low level of efficiency and a vicious circle of 'low productivity → low agricultural surpluses → low non-agricultural sector investments → low domestic technological developments and low capital formation in the agricultural sector leading again to its low productivity' gets established. This lack of capacity of the agriculture to generate surpluses, limits its ability to adopt modern production technology which in the absence of domestic innovations, is mostly imported from the developed countries. Agricultural capital assets remain depleted to an irreducible minimum or at least do not rise above this level establishing a rock-bottom equilibrium between the traditional production technology and low capital availability. This puts the agrarian economy in a precarious position of low and uncertain productivity yielding very low agricultural surpluses. The very forces that

Table-1
Share of Agriculture in Gross National Product
of Selected Countries (at factor costs)

Country	Percent				
	Year				
	1950	1953	1960	1965	1967
United States of America	7	5	4	4	3
West Germany	10	9	6	4	4
Canada	13	11	7	6	6
United Kingdom	6	5	4	3	3
Netherlands	14	12	11	8	7
Norway	15	14	11	9	7
Israel	--	12	12	9	8
Japan	--	21	15	9	--
Taiwan	--	39	31	26	--
Brazil	29	29	28	29	--
Algeria	34	29	21	--	--
Columbia	38	38	35	32	--
Mexico	22	21	19	17	16
Costa Rica	44	41	33	31	26
Philippines	42	43	33	34	33
India	51	51	49	51	49
Pakistan	58	53	53	48	47
Indonesia	54	56	60	56	--
Ceylon	58	54	48	--	41
Tanzania	--	62	61	55	52
Uganda	--	67	61	59	60

Source: United Nations, Statistical Year Books, 1966 and 1969.

make agriculture a major sector of the economy, thus, render it unproductive to leave it incapable of yielding sufficient surpluses and tax revenues to the state exchequer. The whole economy, thus, gets caught up in poverty because its leading sector (agriculture) is neither capable of yielding sufficient surpluses nor does it have the absorption capacity to assimilate improvements in production technology available from elsewhere outside of the economy. The leading sector (agriculture) does not, thus, generate the forces necessary for the non-agricultural sector to move on a sustained growth path; and in turn, it suffers itself. In the absence of foreign investments which remain shy for such an economy, an equilibrium, thus, tends to establish around very low domestic investments and consumption. No doubt the propensity to consume is normally very high in such economies and the income multiplier should be high, yet there are many well known rigidities and inhibiting conditions such as inelastic supplies in such economies which jam up the multiplier effect. Since the levels of consumption and investment remain low, the whole economy operates at a low level with a very low capacity to generate taxable surpluses and voluntary savings.

The basic concern of the developing agrarian economies, therefore, should be to raise their agricultural sector from its boot-straps and make it a responsive and leading sector of the economy in its growth and development. As Stanley Please puts it, the focus of the agricultural taxation policy should be on shifting the emphasis from mobilization of an assumed agricultural surplus to ensuring that surplus is generated and is mobilized.[31]

The major burden of mobilizing the domestic resources, however, falls heavily on the shoulders of the agricultural sector. This burden has to be carried to the point where the non-agricultural sector starts generating much needed modern inputs and supplies, innovating technological improvements and in the process begins to share the tax burdens. Yet it does not mean that

the agriculturists should be pressed like 'sesame seeds'.* The section of the society that lives at a subsistence level pursuing its profession (cultivation) as a way of life cannot be expected to contribute much to the so vitally needed capital resources. Hence a dilemma! Yet, there is a way out of it and an equitable way.

Historically, the agriculture in policy issues has been normally, but erroneously, treated as a homogeneous sector. However, it happens to be a highly heterogeneous sector.** Lesser a country is developed, higher is the degree of this heterogeneity and the disparities in the ownership of capital assets and incomes. Table-2 provides a picture of the disparities in the distribution of cultivated lands among farm households in a few selected countries of Latin America, Africa and Southeast Asia. The figures show that in general the degree of skewness in the distribution of land is inversely associated with the level of economic development of these countries of the developing world. In a more developed country, Japan, for example 90 percent of the households own 64 percent of the area and 98 percent of households own 91 percent of the area. In Mexico, on the other hand, 79 percent of the households own only 1 percent of the land area, whereas 7 percent of the households have holdings above 100 acres each and operate 94 percent of the area.[35,36,37] Income disparities normally correspond to

*Kusum Nayer, based on her study of Japan, indirectly favours this approach in her book 'Lonely Furrow'. [29]

**The analysis of agricultural taxation here does not preclude the necessity of an equitable taxation of the non-agricultural sector. The non-agricultural sector in a developing economy has got to contribute to its full capacity. Its share should keep increasing as the economy moves on a growth path. In the initial stages, agriculture as a leading sector of the economy has to, however, play a major role in the development and mobilization of domestic resources.

Table-2

Distribution of Number of Holdings and Area
Operated in Selected Developing Countries, 1950-60*

Country	Holdings & Area	(Percentages)						
		Size Distribution						
		Below 1 Hec.	Under 2 Hec.	Under 10 Hec.	10-20 Hec.	20-50 Hec.	50-100 Hec.	Above 100 Hec.
Japan	Holdings	64	90	98	1	1	--	--
	Area	30	64	91	6	3	--	--
Taiwan	Holdings	46	72	99	1	--	--	--
	Area							
Israel	Holdings	14	--	85	10	3	--	2
	Area	1	--	17	9	5	--	69
Brazil	Holdings	2	--	34	17	23	11	15
	Area	--	--	1	2	7	7	83
Columbia	Holdings	18	--	71	11	9	4	5
	Area	--	--	7	5	9	9	70
Mexico	Holdings	36	--	79	5	6	3	7
	Area	--	--	1	1	2	2	94
Costa Rica	Holdings	5	--	54	14	20	7	5
	Area	--	--	5	5	15	12	63
Argentina	Holdings	--	--	26	13	14	17	30
	Area	-----	-----	1	-----	1	3	95
Venezuela	Holdings	-----	-----	84	-----	8	3	5
	Area	--	--	4	-----	3	2	91
Philippines	Holdings	19	--	94	4	2	--	--
	Area	3	--	60	15	25	--	--
India**	Holdings	58	16	97	-----3	---	--	--
	Area	7	12	69	--- 3	---	--	--

*Source: Changes in Agriculture in 26 developing countries, Foreign Agricultural Economics Report No. 27, ERS, USDA, 1965.

**Source: National Sample Survey, 17th round, Government of India publication.

the disparities in the distribution of productive assets. In Latin America and African countries, for example, these disparities in income due to the acutely skewed distribution of productive assets (land) are very wide. On one hand, in some of the areas in the tropical Africa, even the use of animal power is not very widespread; and on the other hand, there exist very large mechanized farms which use all the non-conventional inputs and modern production technology.[6] In India, even after two decades of development: planning and socialistic policies, the leading political party (congress) in their mid-term elections manifesto of 1971 laid down one of their objectives to reduce the income disparities to the ratio of one to forty. These income disparities can be more easily visualized in the agricultural sector of this economy where 57.6 percent of the cultivators own less than 1 hectare land holdings and command only 6.67 percent of the total cultivated area. On the other side of the scale, 3 percent of the households operate more than 10 hectares holdings and command 30.97 percent of the cultivated area (Table-3).

Thus, in the developing countries where average earnings per capita are low, there exist acute disparities in the incomes, and these disparities are more pronounced in the agricultural sector because of the acutely skewed distribution of the cultivated land. Yet, in spite of these disparities, with a good tax-paying ability of the upper-income groups, the agricultural sector passes as more or less a homogeneous sector in the taxing policies; and the agricultural elite class normally manages to take shelter behind the myth of a low or no tax-paying ability of the agricultural sector as a whole.

The purpose of this paper is to make a case study of one of these countries (India) with a particular reference to one of the most progressive areas within it (Punjab) with a view to examining the possibilities of mobilizing additional resources from its agricultural sector without leaving

Table - 3

Distribution of the Area Operated and the Households by Size Classes

Size of holdings	Total area operated		No. of households	
	Area (lakh acres)	Percentage	Total No. (in '000)	Percentage
1	2	3	4	5
(a) Below 2.5 acres	216	6.67	41524	57.6
(b) Over 2.5 but not exceeding 5 acres	391	12.08	11606	16.1
(c) Over 5 but not exceeding 7.5 acres	352	10.87	6488	9.0
(d) Over 7.5 but not exceeding 10 acres	294	9.08	3466	4.8
(e) Over 10 but not exceeding 15 acres	446	13.77	3911	5.4
(f) Over 15 but not exceeding 20 acres	304	9.32	1826	2.5
(g) Over 20 but not exceeding 25 acres	232	7.17	1088	1.5
Over 25 acres	1003	30.97	2143	3.0
TOTAL	3238	100.00	72052	100.00

Source: National Sample Survey, 17th Round.

any serious disincentives for its growth and development. Specifically the focus of the analysis is on:

- i) an assessment of the contributions of the agricultural sector to the total state revenue visa-vis the state revenue expenditure on development of agriculture;
- ii) an assessment of the ability of the agricultural sector to generate taxable surpluses consistent with its growth, and
- iii) development of a schematic approach on the agricultural tax structure leaving no serious disincentives to the growth and development of this sector.

This analysis, it is believed, can be useful in providing some helpful guide lines to the agricultural taxation policy investigations in the other developing countries.

Tax Burden on Agricultural Sector:

All the available evidence suggests that the contribution of agricultural sector to the total state revenue in India remained low and its relative share continuously kept declining over the past many decades. Cutt estimated that the land revenue as a percentage of the total tax revenue in India in 1953-54 was only 8.6%, compared to more than 70 percent in 1839-40 and 33.9 percent in the beginning of this century.[5] This further declined to 4.1 percent in 1965-66. Techno-economic surveys of different states in India in 1960-61 brought out that the burden of land revenue per acre was between Rs.1.39 in Orisa to Rs.4.98 in Uttar Pradesh.[26] Punjab, the most progressive state of India, had a very low burden of Rs.2.55 per acre only. No doubt the total receipts of land revenue increased by 14.9 percent between 1951 through 1959, this increase was much less than the increase in the incidence of non-agricultural taxes. The relative share of land revenue in the total state taxes decreased from 23.3 percent to 14.5 percent during this period.[24] In Uttar Pradesh, the biggest state of India, the land revenue receipts remained almost static at Rs.20 crores

since World War II, because the existing rates of land revenue could not be revised before the new 'settlement' which could take place only after an interval of 40 years. The relative importance of land revenue in this state, therefore, declined from 36 percent of the total taxes in the state in 1953-54 to 24 percent in 1962-63.^[25] In the state of Gujrat, the relative importance of land revenue declined from 8.3 percent to 6.3 percent of the total state taxes between the period 1960-61 through 1962-63.*^[25] These are relatively more progressive states of India. Agriculturally less progressive states present a different picture. In Rajasthan state, for example, the share of land revenue to the total state taxes increased from 27.6 percent in 1951-52 to 42.3 percent in 1960-61.^[27] In Bengal, the land revenue and agricultural income tax increased as a proportion of the total state taxes from 11.8 percent in 1951-52 to 15.6 percent in 1958-59.^[28]

These data suggest that as the economy of a region improves, the relative share of agricultural taxes decreases in the total tax revenue. More developed regions or states, thus, have a lesser share of land taxes in their total revenue structure. This does not, however, mean that the absolute burden of taxes on agriculture decreases. Normally and logically the tax receipts from the agricultural sector should keep increasing. At the same time, tax receipts from the non-agricultural sector will increase faster as the economy moves up the growth path, thereby reducing the relative share of agricultural taxes in the total tax revenue of the region or the state. The same is true of different countries. In Taiwan, for example, land taxes as a ratio of the total tax revenue decreased from 24.1 percent in 1903 to mere 6.5 percent in 1943.^[23] This is believed to have declined

*The state of Gujrat was reorganized on 1st May, 1961.

further in the recent decades. The proportion of agricultural taxes to the total tax revenue in Japan decreased from 85.6 percent in 1882-92 to 37.6 percent in 1913-17.[30] Table-4 provides a picture of the changes in this respect in the past one decade for a few of the developing countries.[36,37] The figures in this table suggest that as the economies of these countries developed over time the share of agricultural taxes in the total tax receipts declined.

This secular decline in the relative share of the agricultural taxes in the total tax revenue indicates an increasing role of the non-agricultural sector in a growing economy. Yet, there is no justification for the decreasing incidence of taxes on agriculture when (a) relative share of the sector in the total GNP remains unchanged, (b) proportion of the agricultural population declines or remains the same, and (c) the per capita agricultural income increases.

In India, as shown in Table 5, the relative share of agriculture in the Net Domestic Product remained almost unchanged with 49.1 percent in 1960-61, 48.7 in 1964-65, and 51.4 percent in 1967-68. The percentage of rural population to the total population kept constantly declining. It was 86.1 percent in 1941, 82.7 percent in 1951 and 82 percent in 1961.[9] Yet, the percentage of land taxes to the total tax revenue decreased from 7.92 percent in 1960-61 to 5.49 percent in 1965-66 and 3.63 percent in 1968-69. A very consistent decrease is noticeable in all the states of India.

The situation becomes more disquietening in the context of an increasing proportion of the state revenue expenditure being incurred on the development of agriculture. Table-5 shows that the revenue expenditure on development of agriculture as a percent of the total revenue expenditure was 4.73 percent in 1961-62 which increased to 6.09 percent in 1965-66 and to 6.10 percent in 1968-69. With some minor yearly variations, different states in India also

Table - 4

Share of agricultural taxes in total tax receipts
of some selected developing countries 1954 through 1967.

Country	Description of Tax	1954	1961	1965	1967
Ghana	Contribution by Farmers	--	13.25	15.2	--
Sudan	Agricultural Tax	4.8	--	--	4.8
United Arab Republic	Tax on Lands & Buildings	7.7	--	4.2	--
India		--	7.92	5.49	3.63
Iraq	Agricultural Land Tax	2.3	--	0.3	--
Pakistan	Land Revenue	--	19.0	--	10.6
Syria	On Land, Animals & Agr. Produce	16.7	--	8.8	--

Source: Computed from U.N.O., Statistical Yearbook 1966.

Table - 5
Changes in Share of Agriculture in Net Domestic Product and Share of Land Tax
to Total Tax Revenue in Different States of India

State	Agricultural Income as percent of NDP (current prices)			Land Taxes as percent of total tax revenue			State Revenue Expenditure on Dev. of Agri. as a percent of total revenue expenditure		
	1961-62	1964-65	1967-68	1960-61	1965-66	1968-69	1961-62	1965-66	1968-69
1 Andhra Pradesh	57.92	57.69		11.80	9.30	8.38	3.63	6.52	4.90
2 Assam	59.66	58.79		7.09	8.53	6.51	4.88	6.85	6.81
3 Bihar	51.11	51.89		11.42	9.42	6.24	7.21	7.40	8.63
4 Gujrat	45.55	47.77		7.40	6.06	4.13	5.14	4.95	4.62
5 Haryana	62.45	63.47		5.11	2.85	1.92	3.77	5.61	6.12
6 Punjab	58.06	62.16				1.55		5.74	6.15
7 Jammu & Kashmir	55.79	51.97		2.90	1.39	1.29	3.73	3.45	6.21
8 Kerala	49.46	49.38		2.99	3.23	1.33	4.14	6.15	5.05
9 Madhyz Pradesh	57.52	56.97		11.21	5.69	4.94	4.54	5.17	5.69
10 Maharashtra	41.22	36.41		5.21	2.45	2.13	4.93	9.89	6.81
11 Mysore	51.90	52.93		4.95	4.62	2.34	4.22	1.54	6.52
12 Orissa	54.45	55.78		5.25	3.56	1.45	4.76	6.34	7.12
13 Rajasthan	60.56	61.13		18.78	7.20	4.94	4.59	5.77	4.63
14 Tamil Nadu	46.84	41.11		4.81	3.91	1.52	5.56	7.74	6.30
15 Uttar Pradesh	59.96	63.62		13.72	9.13	6.42	4.25	4.68	5.01
16 West Bengal	39.74	36.53		6.10	4.13	2.97	5.61	8.36	6.96
17 *Average	49.1	48.7	51.4	7.92	5.49	3.63	4.73	6.09	6.10

*Source: Taxation Enquiry Commission Report [13], Techno-Economic Survey of U.P. [28], India 1969 [10] and 4th Five Year Plan.

present the same picture. Thus, the share of agriculture in the net domestic product remaining the same between 1960-61 and 1968-69, the ratio of land taxes to the total tax revenue decreased by 4.29 points in the face of percentage of revenue expenditure on agricultural development increasing by 1.37 points. This is a clear case of decreasing absolute burden of taxes on agriculture relative to the share of national income being generated and the development expenditure being made in this sector.

This lower burden of taxes on agriculture becomes more evident when we examine the proportion of land taxes to the agricultural incomes. For India as a whole, taxes on land in 1967-68 worked out to be 1.34 percent of the agricultural incomes (1962-63 to 1964-65 average). Total taxes on the other hand worked out to be 5.36 of the total income in India (Table 6). Peculiarly, the lesser developed states in India such as Rajasthan and Assam had relatively a higher burden of taxes at 2.49 and 2.21 percent respectively. On the other hand, the most progressive states like Punjab and Haryana had a lower tax incidence of .52 and .63 percent only. Some lesser developed states such as Orissa and Bihar also had a low tax burden; yet in their case, per capita agricultural income and total tax burden was also very low. An over-all picture of the tax burden on agriculture in India is provided by the ratio of taxes to the agricultural incomes in Table-7. This ratio declined from 1.59 in 1960-61 to 0.70 in 1969-70. More interestingly, the additional incomes accruing in this period have either not been taxed at all or have been taxed very nominally. In some years while the incomes increased, there has been a decrease in taxes.

Scope for Taxation:

The analysis in the preceding section suggests that the agricultural sector in India is taxed very lightly as compared to the non-agricultural sector of the economy. This tax-burden has been decreasing over time and

Table - 6

Per Capita Tax Revenue (1967-68) as a Percentage of Per Capita Income (1962-63 to 1964-65 Average) in Different States of India

State	Taxes on Land Including Agr. Income Tax as Percent of Total National Income	Taxes on Land as Percent of State Agri. Income	State Incomes (Rs.)	Total Tax Revenue as Percent of Total National Income
	1	2	3	4
Punjab	0.28	0.52	492	7.61
Maharashtra.. ..	0.40	1.20	478	7.63
West Bengal.. ..	0.51	1.43	465	5.66
Gujarat.. .. .	0.59	1.43	462	6.23
Haryana.. .. .	0.35	0.63	445	6.51
Tamil Nadu	0.46	1.13	400	7.34
Assam	1.16	2.21	393	4.35
Andhra Pradesh ..	0.51	0.95	386	5.10
Mysore	0.91	1.89	373	6.24
Kerala	0.77	1.76	341	8.05
Madhya Pradesh ..	0.60	1.16	325	5.21
Rajasthan	1.35	2.49	314	6.21
Uttar Pradesh ..	0.99	1.73	306	4.77
Orissa	0.27	0.52	306	3.96
Jammu and Kashmir ..	0.49	1.00	302	6.44
Bihar	0.24	0.52	265	4.55
All States	0.62	1.34	369	5.36

Source: Report on currency and finance for the year 1968-69, Reserve Bank of India, Bombay 1969, pp. 264

Table - 7

Gross National Product Originating in
Agriculture and Direct Tax Burden On
Agriculture, India, 1960-61 through 1969-70

Year	NDP Originating in Agricultural Sector	Direct Taxes on Agriculture (Land Revenue & Income Tax)	Ratio of Taxes to Incomes	Ratio of Change in Taxes to Change in Income
1960-61	67070	1067	1.59	
1961-62	70100	1046	1.49	-.007
1962-63	71960	1296	1.80	.134
1963-64	84730	1327	1.56	.003
1964-65	101550	1305	1.28	-.001
1965-66	98010	1218	1.24	.025*
1966-67	115950	1001	0.86	-.012
1967-68	130000	1080	0.83	.005
1968-69	150000	1140	0.75	.003
1969-70	158000	1160	0.70	.0002

*Ratio of decreased taxes on decreased income.

Source - Barla, C.S. [3]

the additional incomes have been taxed very nominally. This, however, needs to be read with a caution. In the agricultural sector, more than 70 percent of the total population of the country shares less than 50 percent of the net domestic product; compared with less than 20 percent of the population in the non-agricultural sector sharing more than 50 percent of the net domestic product. The average per capita income is, therefore, much higher in the non-agricultural sector.* The tax-paying ability should, therefore, be higher in the non-agricultural sector compared with that in the agricultural sector. This explains the justifiability of the low per capita or per rupee income tax-burden in the agricultural sector; yet the disquietening aspect of the situation is that the share in the national income remaining the same, population balance slightly tilting towards urban areas and an increasing share of the state revenue being spent in the agricultural sector, the relative burden of taxes is decreasing further and increments to the incomes are taxed only nominally and sometimes not at all. There seems to be a considerable scope, therefore, for mobilization of resources from the agricultural sector of the economy. Increasing the level of tax-burden in its present structure cannot be, however, justified.

The crux of the problem is that in policy issues, agriculture has been considered as more or less a homogeneous sector and the average sector-incomes have been regarded as indicators of the level of agricultural prosperity (or poverty) for the purpose of taxation. If the heterogeneity in the distribution of productive assets in this sector has been understood, the disparities in incomes have not been recognized and taxed to the right extent. No doubt surcharges and other betterment levies and taxes have been charged and enhanced with a view to making the land taxes progressive, equitable and more elastic, yet the degree of progressiveness and elasticity has

*Per capita expenditure of urban population in 1963-64 was 47 percent higher and of four big cities (Bombay, Calcutta, Madras and Delhi) was 133% higher than that of rural population in India.[9]

remained to be deplorably low. Barla describes the present land revenue system in India as having lost its importance as a source of finance, failed to tax increased agricultural incomes and to take into account increased value of land and tax paying capacity of the cultivator.[3]

The scope for increasing the share of agricultural taxes in the state revenue lies in acute disparities in the distribution of productive assets and incomes of the cultivators. The Reserve Bank of India estimated that in the year 1965 the two highest asset groups which formed 13 percent of the total rural households held about 58 percent of the total tangible wealth of rural India. The two lowest asset groups forming 30 percent of the total households held only 2.5 percent of the total tangible wealth.[33]

There is a great diversity of occupations in the rural areas even within the profession of agriculture. Agriculture in addition to arable crop farming includes dairy, poultry, fish culture, plantations, forestry, etc. The size distribution of productive assets and incomes is not available for all pursuits and sizes of farms. Yet, the net domestic product from agriculture (excluding that originating from forestry and fishing, etc.) can be apportioned to different size holdings in order to get fairly reliable estimates of the distribution of agricultural incomes. If pursuits such as poultry and dairy, etc. introduce any bias, it will be to further widen the disparities, because low income groups in agriculture are mainly those operating very small land holdings producing food grain crops, such as wheat, rice, corn and millets. Commercial dairies and poultries are run mainly by the bigger farmers. Therefore, if the net domestic product is apportioned according to the holding size distribution in India, it will give a fair degree estimate of the distribution of agricultural incomes. Table-8 provides the distribution of the operational area among different size groups of agricultural households in India. The figures show that 61.30 percent of the area operated is commanded by only 12.4 percent of the

Table - 8

Distribution of the Area Operated and the Households by Size Classes in India

Size of holdings	Total area operated		No. of households	
	Area (lakh acres)	Percentage	Total No. (in '000)	Percentage
1	2	3	4	5
(a) Below 2.5 acres	216	6.67	41524	57.6
(b) Over 2.5 but not exceeding 5 acres	391	12.00	11606	16.1
(c) Over 5 but not exceeding 7.5 acres	352	10.87	6438	9.0
(d) Over 7.5 but not exceeding 10 acres	294	9.08	3456	4.8
(e) Over 10 but not exceeding 15 acres	446	13.77	3911	5.4
(f) Over 15 but not exceeding 20 acres	304	9.39	1826	2.5
(g) Over 20 but not exceeding 25 acres	232	7.17	1088	1.5
Over 25 acres	1003	30.97	2143	3.0
TOTAL	3238	100.00	72052	100.00

Source: National Sample Survey, 17th Round. [11]

cultivator-households with a holding size 10 acres and above. On the other end of the scale, 57.6 percent of the households cultivate only 6.67 percent of the land area. In the year 1967-68, the total national income at current prices was estimated at Rs.28187 crores.*[9] Of this, Rs.14480 crores (51.4 percent) originated in agriculture (not including forestry, logging and fishing). If we apportion this income on the basis of farm size groups, 61.30 percent of the income should have originated from holdings above 10 acres. The 61.30 percent of net domestic product originating from agriculture amounts to Rs.8876 crores (Table-9).** Taking the mid-points as representatives of size groups, the distribution of the net domestic product originating in agriculture will be as in column 5 of Table-9. The average farm income of different farm size groups will be as in column 6. In India cultivators and agricultural labourers are in the ratio of 4:1 (64464 and 17324 respectively).[10] Although agricultural labourers always get lesser share of the farm income compared with that of the cultivators and this disparity widens on larger farms, if we allocate the farm income proportionate to their number, the adjusted 4/5 of the income in column 6 would work out to be as in column 7. On the basis of the 1970-71 income tax structure of India, the farm size groups of 15 acres and above will, thus, come under the tax limits.*** On an average, a farmer owning and operating

*One crore = 100 Lakh = 10 million.

**The quality of land, irrigation facilities and locational factors affect the productivity of the land. These quality factors are more favourably located with the small farms. Therefore, the productivity per acre is normally higher on the small farms. Yet, the returns to management per acre are higher on large farms because on small farms a larger portion of the gross returns get allocated to the family labour. The estimates of the income disparity do not, thus, get distorted in the opposite direction even if the influence of these factors is accounted for.

***Rates of income tax used here are as of 1970-71: No tax on first Rs.5000, 10 percent on next Rs.5000, and 15 percent on next Rs.5000 with a surcharge of 10 percent on the value of tax.

Table - 9

Distribution of Farm Size (10 acres & above), Agricultural Incomes and
Estimates of Income Tax at 1970-71 Rates in India, 1967-68

Farm Size Group	Total Area Operated		Mid Point of Size Groups acres	Share in Net Domestic Product* (Crore Rs.)**	Average Farm Income (Rs.)***	Income After Adjustments for Labour Share	Tax Estimates at 1971	
	Lakh Acres	Percent of Total Area					Income Tax Rates Per Farm (Rs.)	Total Tax Rates (Crore Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10 to 15 acres	446	13.77	12.5	1993.8	5588	4471	--	--
15 to 20 acres	304	9.39	17.5	1359.6	7823	6258	138.38	24.04
20 to 25 acres	232	7.17	22.5	1038.2	10057	8046	335.06	34.10
25 acres & above	1003	30.97	30.00	4484.4	13410	10728	670.12	220.71
	1985	61.30	--	8876	--	--	535.23	278.85

Source: National Sample Survey, 17th Round[11]; India 1969 [9], Currency & Finance, 1968-69.[31]

*Calculated on the basis of column (3) (Example: $1993.8 = \frac{8876}{61.30} \times 13.77$)

**One crore = 100 Lakh = 10 million

***Calculated on the basis of column (2) and (4) (Example: $5588 = \frac{1993.8}{4.46} \times 12.5$)

17.5 acres of land should be paying an income tax of Rs.138/- on an income of Rs.6258 per annum. The tax liability of a 22.5 acre holding will be Rs.335/- and of the 30 acres holding, it will be Rs.670/-. This will give an automatic exemption on all land holdings less than 15 acres. On this basis, the agricultural income tax receipts should amount to over Rs.278 crores. But a part of the land area is leased out and thus all of these holdings, 15 acres and above, will not fall within the taxable category. Based on the census of land holdings conducted in India in 1953-54, it is estimated that 13.7 percent of the area of owned holdings above 10 acres gets leased out (Appendix-A). An adjustment for 13.7 percent leased out area will reduce the tax receipts to Rs.240 crores which will be 1.66 percent of the total agricultural incomes compared with all the land taxes put together amounting to only 1.34 percent of the agricultural incomes in 1967-68. As a proportion of the total national income, it will work out to be .85 percent as compared to the 1967-68 figure of 0.62 percent. In an absolute value, the potential for agricultural income tax amounting to Rs.240 crores compares very favourably with the 1967-70 total agricultural taxes of Rs.116 crores. A point of particular emphasis here is that the tax revenue from agriculture through a progressive agricultural income tax alone can be increased about 25 percent with an equitable distribution of tax burden. This will increase the burden on higher income groups consistent with their tax-paying ability and will exempt the lower income groups (up to 15 acres holdings). However, it may not be the final shape of the agricultural tax-structure. All this simply demonstrates the possibilities of mobilizing resources from the agricultural sector through rationalization of the tax burden at par with non-agricultural sector earnings, taking into account wide disparities in the income distribution.

A Schematic Proposal:

From time to time, various proposals have been made for agricultural tax reforms in India. Gyan Chand suggested a land tax on the basis of the capital value of land. This proposal does not, however, distinguish between the stock of capital and the flow of incomes. If adopted, it will adversely affect the capital formation, which would be suicidal to the developing economy.[18] The Taxation Enquiry Commission (1953-54) made recommendations on the standardization of land revenue assessments and reduction in the time interval of revenue assessments. These recommendations, however, lacked scientific basis for tax assessment and did not provide much insight to the policy-makers with respect to the methods of tax assessment which would be consistent with the objectives of progressiveness and elasticity of the tax structure. The Commission, however, made a cogent suggestion that all types of incomes, agricultural and non-agricultural should be taxed under a common income tax policy.[13] Gulati suggested a schedule of progressive land revenue on an increasing per acre rate on larger holdings.[17] It was a simpler scheme, yet it did not take into account the productivity of land. Also, the rates suggested were arbitrary. Khusro suggested an arbitrary upwards revision of the rates of land revenue. His suggestion was to exempt all holdings below 5 acres, an increase of Rs.2/- per acre (from Rs.3/- to Rs.5/-) on holdings between 5 to 10 acres and a rate of Rs.10/- per acre on all holdings above 10 acres. Later he made some revisions in his suggested rates, yet the recommendations remained purely arbitrary and did not have much scientific basis.[21, 22] Gandhi suggested a tax on farmers' incomes. This was a reasonable approach from the view point of equity, progressiveness and elasticity; yet he did not present any concrete scheme to make reasonable estimates of incomes which would be consistent with the canons of simplicity

and productivity of the tax. [15,16] Barla argued for an increase in the agricultural taxation based on the data relating to increases in cropped area, yields and incomes as well as disparities in incomes. He came out with a figure of Rs.478.16 million potential for agricultural income tax for the Punjab State alone. He demonstrated the fact that there was a need for additional taxation on agriculture in India*, yet he did not present any cogent scheme to assess incomes and levy the tax on individual farmers. [3]

What is needed is a schematic approach for assessment of the individual taxable farm earnings in order to make the agricultural tax structure an equitable and elastic one without losing its simplicity and compromising on productivity. An ideal tax structure must meet the test of equity and justice; yet, at the same time, should provide a sense of participation to the people at large. A reasonable scheme of taxation should, therefore, be composed of:

i) A broad-based coverage to involve the largest possible number of people. This may not be consistent with the canon of productivity, because the per capita tax yield from a large majority of the people will be very low and in many cases only nominal. Yet, in a democratic society endeavouring to establish a socialistic pattern of economy, it is important to provide a sense of participation to the people at large in the national development endeavour.

ii) An equitable tax burden which should be consistent with the tax-paying ability of the individuals. The tax structure should, therefore, be progressive and elastic. A progressive and elastic tax can meet the test of productivity also.

*His arguments, of course, suffer from many inconsistencies. One serious omission is that he does not take into account the high proportion of population in rural areas while trying to show a low tax burden in the rural sector.

iii) A built-in mechanism to check and remove any acute disparities in the distribution of capital assets and capital gains, without leaving serious disincentives for the process of capital formation. The tax structure, of course, has to be simple enough to be easily manageable by the public agencies and readily intelligible to the people at large.

Based on these requisites, a combination of four taxes can provide an appropriate tax structure for a developing agriculture. The first tax recognizing the state as an ultimate and the superior most owner of the land has to be a tax on land rent, i.e., land revenue*. Gupta and Singh believe that state is a partner in proprietary profits and the tax which it levies is tax on the rent and is not a land tax.[19] Since it is a nominal tax and in the relative sense has almost lost its value in the total revenue of the state, such a tax will serve mainly the purpose of providing a sense of participation to a large proportion of the rural population in India. Some proponents of equity and justice recommend exemption of small cultivators from paying the land revenue[19,20] and many states in India have recently passed legislations to abolish the land revenue on small holdings. These exemptions do not, however, serve any useful purpose. Administratively and financially these exemptions cannot be justified and they render no social justice. The incidence of land revenue in India is so low (Rs.4.40 per hectare) that the so called relief through exemptions amounts to only a nominal sum of no significance at all. On the other hand, apart from many other complications, the registration of cultivators owning land holdings below certain acreage and maintaining this record updated will involve some additional costs which might be higher than the total amount of exemptions

*For a detailed definition and explanation of land revenue, see Douie M. James [6].

granted. These funds can be used in many better ways in the help of small farmers than to exempt and dole out such meager amounts of money to them and make them psychologically feel small and poor. A large chunk of the population in this process can lose the pride of participation in the national effort without any financial relief of any significance. Such a measure has no economic or social value except a political propaganda, which can not match with the ethical standards of any political party genuinely dedicated to the development of the economy and the uplift of the people. Basic land revenue should continue on all lands irrespective of the size of holdings.

The second and the most significant tax should be the Agricultural Income Tax. The requisites of equity, justice, progressiveness and elasticity demand that the tax should have a direct bearing on the tax-paying ability of the individuals. Ideally, detailed accounts of incomes of all individuals should be maintained and taxes levied under a common income tax policy irrespective of which sector the income originates from. But maintaining details of costs and returns on all farms and all-size enterprises and pursuits of the people is a stupendous task. It will be physically impossible and cost-wise prohibitive. On administrative grounds, the tax assessment and collection should be fairly simple. The income tax assessment has to be, therefore, based on a combination of (1) some details of individual production programs and (2) reasonable standards in respect of some variable such as yields and returns. The individual farm details will be needed on the acreage planted under different crops and levels of other farm enterprises. The updated standard coefficients of yields and production costs of crops and other farm enterprises will be needed for different homogeneous type-of-farming areas.

The individual details can be easily recorded and maintained by the village revenue clerks (Patwaris), without much of an additional cost, in areas where such an agency already exists.* Where such an agency does not exist, establishment of it is even otherwise required, irrespective of its necessity for this purpose, in order to have a broad and reliable base for agricultural statistics. Area-wise updated reasonable standards of costs and returns can be worked by the agricultural economics research institutes and agencies of the state and the agricultural universities.** These organizations and institutions can be made responsible for this task, which they do otherwise even. If at all, some additional resources should be needed by these agencies, the amount will be nominal and well spent, because in the process it will also strengthen the research base of these institutions.***

Let us take an example of a typical 6 hectare irrigated farm in one of the districts (Ferozepur) in the Punjab and illustrate the method (refer Table-10). At this level of income (Rs.8339), the farmer will have to pay a tax of Rs.367/- at the 1970-71 rates of general income tax. This is understandably much higher than the one estimated in Table-9 for this size of farms in India, because this farm is all irrigated and is located in a

*In most parts of India, detailed records on crops grown on each plot of land with the name of the cultivators, ownership rights, etc., are already maintained on a regular basis by the revenue departments of the different states through the revenue clerks permanently stationed in the villages.

**A multiple number of such research agencies already exists in almost all the states of India and considerable amounts of money are already being spent on estimating costs of production of various crops in different parts of the country. To mention a few, there is at least one agricultural university (with Dept. of Economics) in almost all states; and almost all the states have Boards of Economic Enquiry and State Economic Advisors. There exist some regional agro-economic research centers in addition.

***Farmers' organizations can also be consulted on the basis of their records before establishing these standards on yields, costs and returns.

Table - 10

Assessment of Taxable Income of a 6-Hectare Irrigated
Crop Farm in Ferozepur District of Punjab (India), 1968-69

Crop Enterprises*	Level of Enterprise (Hectares)*	Net Returns on Cost A ₁ Basis (Gross Returns—Cost A ₁)**	
		Per acre (Rs.)	Total (Rs.)
Rabi Season:			
Wheat Mexican	5	1013	5065
Wheat Local	.5	303	152
Rabi Fodders	.5	--	--
Kharif Season:			
Corn (Desi)	1.50	79	108
Paddy	1.00	735	735
Cotton American	2.00	947	1894
Cotton Desi	.5	771	385
Kharif Fodders	.75	--	--
Kharif Fallow	.25	--	--
Total	--	--	8339

*These details are already being maintained by the village Patwari, based on field-to-field survey.

**Figures taken from Kahlon, A.S., et.al., [20]. Cost A₁ includes all cash and kind expenses incurred less land rent.

very productive area. The unirrigated farms or less irrigated farms located in less favorable areas will, of course, yield lower returns than those estimated in Table-9 and may not even come up to the taxable income scale.

On this farm situation, all the land is irrigated and only general crops have been considered. There should not be, however, any limitation on the treatment of unirrigated lands and other crops and crop varieties. Crop-patterns of all kinds, dairy, poultry or any other commercial enterprise can also be included and accounted for in the production programs of the farmers. A little extra effort on the part of the village Patwari and coordination of his activity with the village Panchayat and a little more careful supervision can turn out highly reliable records of the production programs of the farmers.* On yields and returns, very reliable data are already being generated in respect of all farm enterprises. This can be updated at a very nominal extra-cost. These little extra efforts do not involve much additional costs and to the extent they do, the money is worth spending in the interest of improving the general statistical base for the agriculture policy research and administration. This system has the advantage of introducing flexibility in the tax structure. Tax rates can be easily raised or lowered as and when desired to make them more equitable and progressive.

A point of emphasis is that reasonable yield and returns standards can be easily determined keeping in view weather and other uncertainties. Statistical techniques do not lack in this respect. The crux of the problem is that in spite of taking account of the weather and other uncertainties, the actual returns of individual farmers can go lower or above these standards. Individual efforts and management can make a significant difference, even

*The Punjab Government Revenue Department, for example, already requires the village Patwari to make plot-wise entries of crops grown by the individual farmers in the presence of village leaders.

if such standards are worked out for completely homogeneous type-of-farming areas and types of farms. Yet, this is in fact a strong point in favor of this system of using standard yields and returns for the purpose of tax assessment. The individual that obtains higher returns than the standards, gets rewarded for his efficiency and efforts. Those who produce less than the standards are punished for their inefficiency. The system, thus, has a built-in mechanism of rewarding the efficiency and punishing the inefficiency.

The third tax has to aim at reducing disparities in the distribution of capital assets beyond certain reasonable limits.* This has to be, therefore, a tax on capital assets; yet, at the same time, it should not leave any serious disincentives for new investments. In the early stages of growth, incentives, in fact, need to be consciously planned and strengthened in order to initiate and accelerate the process of capital formation in the developing agriculture. While reduction in tax rates and investment rebates on tax liabilities can encourage capital investments, the tax on capital assets can, if inappropriately structured, provide a strong counter disincentive. The recent imposition of wealth tax on agricultural lands and other rural property in India is an outstanding example of such an ill-conceived tax, which is liable to hit hard the capital formation process and tell upon the efficiency in the agricultural sector through the subdivision of holdings. An appropriate tax in this category will be the 'death-duty' or an 'inheritance-tax'. Such a tax amounts to the society (Government) sharing the property passing in inheritance. The society is logically entitled to such a share, because it had helped the individual in building up the property through creating a healthy investment environment

*This is a subjective value and can change with the objectives of the society at different points of time.

and perhaps through tax rebates and incentives on investments. Such a tax should not provide any serious disincentives in the lifetime of the individual because the immediate incentives of tax rebates can more than counterbalance the after-life considerations. At the same time, the tax provides an effective check on the generation to generation transfer of cumulative wealth, which if unchecked may lead to the acute disparities and an economic as well as social polarization in the society. The inheritance tax combined with financial-loans facilities to those who inherit in order to enable them to pay off the tax, provides a good means of mopping up the disparities and raising public finances. At the same time, it leaves sufficient incentives, challenges and opportunity for the individuals for endeavour to increase returns and retire the loans on inherited property. This does not, thus, create a class of hereditary big landlords, but makes it necessary for those who inherit the property to work hard in order to maintain and increase their capital assets.*

The fourth tax should be a tax on gifts and capital transfer gains. This will tax the property transferred during the lifetime of the owner and will keep in check the ingenuine transfers of property to avoid inheritance tax.

Thus, a combination of these four, i.e., a basic land revenue on all lands irrespective of the size of holdings, a progressive agricultural income tax, an inheritance tax and a capital-gains or gift tax should provide an appropriate tax structure for the agricultural sector of a developing economy.

*By the same argument, the inheritance tax and death duties are justified in all the sectors of an economy.

Appendix - A

Area Owned and Leased Out By the Owners of Land-
holdings Above 10 Acres, Based on Census of Land-
holdings in India, 1953-54

State	Area Owned (000 acres)	Area Leased Out (000 acres)	Leased Area As Percent Of Owned Area
Andhra Pradesh (a)	32990	3208	9.7
Gujarat & Maharashtra (a)	60282	9143	15.1
Madhya Pradesh (a)	32185	2149	6.6
Madras (a)	15040	1913	12.7
Mysore (b)	20444	4200	20.5
Punjab & Haryana (b)	12295	3322	27.0
Delhi (b)	89	2	2.6
Hinachal Pradesh (b)	168	8	4.7
Kerala (c)	4503	406	9.0
Rajasthan (c)	1438	244	16.9
Uttar Pradesh (c)	44	0.47	1.07
Total/average	179478	2459547	13.7

(a) Based on complete enumeration of holdings of all size groups

(b) Enumeration was restricted to 10 acres or more

(c) Enumeration was made on sample basis

Source: Government of India, Third Five Year Plan, Planning Commission,
New Delhi (Undalir) pp. 241-249.

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